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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Reissue Application No. : **09/553,413**  
Applicants / Appellants : **Briere, et al.**  
Filed : **April 20, 2000**  
Title : **BLOW MOLDING DEVICE FOR PRODUCING  
THERMOPLASTIC CONTAINERS**  
Art Unit : **1722**  
Examiner : **Robert B. Davis**  
Confirmation No. : **5942**  
Attorney Docket No. : **11496/195086**  
Customer No. : **00826**

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**APPEAL BRIEF**

(37 C.F.R. § 1.192; Application for Reissue of a Patent)

This Appeal Brief in the above-identified application for reissue of U.S. Patent No. 5,968,560 is filed pursuant to the “Notice of Appeal from the Examiner to the Board of Patent Appeals and Interferences” which was filed on January 7, 2004.

**1. REAL PARTY IN INTEREST**

The real party in interest in this appeal is Sidel S.A. of Le Havre, France, the assignee of the above-referenced patent application. Sidel is a company of the Tetra Laval Group of Pully, Switzerland.

## 2. RELATED APPEALS AND INTERFERENCES

There are no related appeals and/or interferences involving this application or its subject matter. A continuation of the subject reissue application was filed July 9, 2001, bears Application No. 09/902,475, and remains pending.

## 3. STATUS OF CLAIMS

Claims 1-14 were issued in U.S. Patent No. 5,968,560. Additional claims 15-40 were filed during prosecution of the application for reissue. Additional claims 22-33 were canceled. Claims 1-21 and 34-40 are pending.

Claims 1-21 and 34-40 are the subject of this appeal.

Claims 1-21 and 34-40 stand finally rejected under 37 C.F.R. § 1.175(b)(1) until a supplemental reissue declaration is provided. The Applicant will provide a supplemental reissue declaration.

Claims 15-21 and 34-40 stand finally rejected under 35 U.S.C. § 251 as being an improper recapture of subject matter surrendered during prosecution of the application for patent from which U.S. Patent No. 5,968,560 issued.

## 4. STATUS OF AMENDMENTS

No amendments were filed after the final rejection.

## 5. SUMMARY OF THE INVENTION

The present invention relates to improvements made to machines and articles of manufacture for use in the production by blow-molding of thermoplastic containers such as plastic bottles. (Column 1, lines 5-8; Claim 1). Blow molding begins with a pre-heated tubular

blank known in the art as a preform, (column 3, lines 37-42,) which resembles a plastic test tube with a threaded neck. The preform is placed inside a mold or shell and then rapidly expanded using compressed air. (See column 2, lines 2-5, discussing the pressure and seals related to blow molding). In general, the improvements expedite the process of changing the inner mold or shell when a new container shape is desired. (Column 1, lines 12-17).

The claims of U.S. Patent No. 5,968,560 are directed to a machine for manufacturing thermoplastic containers. (Column 3, lines 37-42; *see* Claim 1). The machine includes at least one mold assembly 1, which consists of two half-molds 2 respectively supported by two mold carriers 3 that can move one with respect to the other. (Column 3, lines 43-45). Each half-mold 2 comprises a shell 7 and a shell holder 9. (Column 3, lines 56-59). Each shell 7 contains the half-impression 8 of the container or bottle to be molded. (Column 3, lines 57-58). In one embodiment, each shell 7 may be removably fastened to its shell holder 9 by quick-fixing means. (Column 4, line 66, to column 5, line 1). Each shell holder 9, in one embodiment, includes internal pipes 11 and connections 12 for the circulation of cooling or heating fluids. (Column 4, lines 1-4).

The claims added during reissue are directed to an article of manufacture – specifically, a mold assembly 1 – for use with a machine for manufacturing molded thermoplastic containers. (Claim 15). The mold assembly 1 comprises two mold shells 7, two mold shell holders 9 shaped to be supported by two mold carriers 3, and at least one quick-fixing locking member securing at least one shell 7 to its respective shell holder 9. (Claim 15; *see also* column 3, lines 61-67).

## STATEMENT OF FACTS

### I. The Prosecution History of U.S. Patent No. 5,968,560

A copy of independent claim 1 (as originally presented) in the patent application that matured into U.S. Patent No. 5,968,560, appears in Appendix C along with a copy of claim 1 (as amended) with the amendment shown in bold.

U.S. Patent No. 5,968,560 (attached hereto in Appendix E) issued from an application filed under 35 U.S.C. § 371 and based upon an international application, which claimed priority to a French application filed April 19, 1995. The U.S. application was filed October 17, 1997, and assigned Application No. 08/945,089.

The first Office Action dated June 26, 1998, rejected all claims 1-13 as being indefinite under 35 U.S.C. § 112, ¶ 2, and obvious under 35 U.S.C. § 103(a) and unpatentable over U.S. Patent No. 4,072,456 issued to *Appel, et al.*, taken together with U.S. Patent No. 1,409,591 to *Schavoir* and others.

In response, the Applicant filed an "Amendment Under 37 C.F.R. § 1.115," in which the only independent claim (claim 1; *see* Appendix C) was amended to add the phrase, "which are made in the form of enveloping structures and," as shown below:

Claim 1. (amended) Device for manufacturing containers, ~~in particular bottles,~~ made of a thermoplastic by blow molding or stretch-blow molding of a preheated preform, the said device including at least one mold (1) consisting of two half-molds (2) respectively supported by two mold carriers (3) which are made in the form of enveloping structures and which can move one with respect to the other, characterized in that each half-mold (2) comprises a shell holder (9) supported by the respective mold

carrier (3) and a shell (7) which is provided with a half-impression (8) of the container to be obtained and which can be removably fastened to its shell holder (9) by quick-fixing means (19-23), the shell (7) and the shell holder (9) being in complementary shapes in order to be in at least partial mutual thermal-conduction contact while the pipes and connections for the circulation of cooling and/or heating fluids (11, 12) are provided exclusively in the shell holder.

(Applicant's "Amendment Under 37 C.F.R. § 1.115" at 2; attached hereto in Appendix F). The Applicant also submitted arguments traversing the obviousness rejection:

"Amended claim 1 defines a structure provided with mold carriers 3 which envelop or surround shell holders 9, wherein mold-carriers 3 are movable one with respect to the other, and in which shell holders 9 support a shell 7.

...

"In sum, neither *Appel* nor *Schavoir* teach or suggest a device including a three-part structure, i.e., including

- an enveloping mold carrier
- a shell holder
- a shell."

("Amendment" at 5, 7). Following entry of the Amendment, a Notice of Allowability was mailed and the application issued October 19, 1999, as U.S. Patent No. 5,968,560.

## **II. The Prosecution History of the Application for Reissue**

On April 20, 2000, the application for reissue was filed, including original patent claims 1-14 without amendment and additional claims 15-33.

In a first Office Action, the Examiner rejected claims 22-31 as being anticipated under Section 102 or obvious under Section 103. The Examiner acknowledged, "Claims 1-21, 32 and 33 are allowed over the prior art of record." (Office Action dated Feb. 28, 2001, at 6).

A first Notice of Allowability issued March 22, 2001, following a first personal interview on March 22, 2001, during which the rejected claims 22-31 were canceled by an examiner's amendment.

A telephone interview was conducted on May 22, 2001, during which a substitute claim 15 was proposed, along with new claims 34-40. The claims were entered by examiner's amendment.

A second Notice of Allowability issued May 30, 2001, allowing all the pending claims, 1-21 and 32-40.

On November 8, 2001, a Petition to Withdraw the Application from Issue was filed, along with an Information Disclosure Statement with five (5) references brought to light during litigation then pending involving U.S. Patent No. 5,968,560.

On March 18, 2002, in a second Office Action, the Examiner withdrew the indicated the allowability of claims 32 and 33 under Section 103. The Examiner again acknowledged "Claims 1-21 and 34-40 are allowed over the prior art of record." Office Action dated March 18, 2002, at 2.

In response, the Applicant canceled claims 32 and 33. The Applicant expected a notice of allowability.

On June 18, 2002, however, in a third Office Action, the Examiner withdrew the indicated allowability of claims 15-21 and 34-40 as being an improper recapture under Section 251. The third Office Action marks the first time the recapture issue was raised.

On August 20, 2002, during a second personal interview, the Examiner agreed that adding the mold carrier shape limitation would overcome the recapture rejection:

“[Applicant] proposed to add the phrase ‘said shell holders being shaped to be supported by two mold carriers made in the form of enveloping structures’ to each of claims 15, 35, 36 and 39. The examiner agreed that this would overcome the recapture rejection set forth in paper number 26. The addition of the aforementioned phrase as a required characteristic of the mold shell holders is sufficient to prevent recapture of subject matter surrendered in the original prosecution.”

(Examiner’s second Interview Summary at 3; emphasis added). The Applicant again expected a notice of allowability.

On November 20, 2002, however, in a fourth Office Action, the Examiner reiterated the rejection of claims 15-21 and 34-40 as being an improper recapture under Section 251.

On January 9, 2003, during a third personal interview, the Examiner again agreed that the mold carrier shape limitation would overcome the recapture rejection:

“... the reissue claim is narrower than the surrendered subject matter (original presentation of claim in Patent application) in an aspect germane to the prior art rejection and broader in an aspect unrelated to the prior art



rejection, that is, broader in that it claims the corresponding subcombination (mold assembly). Reference was made to MPEP section 1412.02 and page 1400-15 citing *In re Clement*, 45 USPQ2d 1165. Since the claims in the reissue application already recite the limitation 'said shell holders being shaped to be supported by two mold carriers made in the form of enveloping structures,' the recapture rejection is hereby withdrawn and the case is in condition for allowance."

(Examiner's third Interview Summary at 3; emphasis added). As before, the Applicant again expected a notice of allowability.

On April 11, 2003, in a fifth Office Action, the Examiner withdrew the indicated allowability of claims 15-21 and 34-40 and reiterated the recapture rejection.

The Applicant filed a response May 30, 2003. On October 10, 2003, the Examiner issued a sixth and final Office Action, repeating the recapture rejection.

The Applicant filed a Notice of Appeal on January 7, 2004.

A copy of independent reissue claim 15, showing the amendments made during prosecution, appears in Appendix D alongside patent claim 1 (as issued), for comparison.

## 6. ISSUES

I. WHETHER THE REISSUE CLAIMS DO NOT RECAPTURE SURRENDERED SUBJECT MATTER BECAUSE THE MOLD CARRIER SHAPE CONTINUES TO BE A REQUIRED CHARACTERISTIC OF THE CLAIMED ARTICLE.

A. Whether the Reissue Claims Are Narrower Than the Surrendered Subject Matter, In an Aspect Germane to the Rejection.

B. Whether the Reissue Claims Are Broader Than the Surrendered Subject Matter, In an Aspect Unrelated to the Rejection.

## 7. GROUPING OF CLAIMS

Claims 1-21 and 34-40 are the subject of this appeal. Claims 1-14 are the original patent claims. Claims 15-40 were added during prosecution of the application for reissue. Claims 1-21 and 34-40 are pending. The independent claims are 1, 15, 35, 36, and 39.

With respect to the recapture rejection only, which is the sole issue in this appeal, claims 15-21 and 34-40 stand or fall together.

## 8. ARGUMENT

The Applicant and the Examiner agree that all the claims are patentably distinguishable and allowable over the prior art. (*See, e.g.*, the first Office Action dated Feb. 28, 2001, at 6; the first Notice of Allowability dated March 22, 2001; the second Notice of Allowability dated May 30, 2001; and, the second Office Action dated March 18, 2002, at 2). The only issue remaining to be decided in the application, and in this appeal, is whether the reissue claims recapture surrendered subject matter.

### I. THE REISSUE CLAIMS DO NOT RECAPTURE SURRENDERED SUBJECT MATTER BECAUSE THE MOLD CARRIER SHAPE CONTINUES TO BE A REQUIRED CHARACTERISTIC OF THE CLAIMED ARTICLE.

The recapture rule does not bar the reissue claims because the narrowing amendment (the mold carrier shape) continues to be a required characteristic of the article in the reissue claims. The recapture rule “prevents a patentee from regaining through reissue the subject matter that he surrendered in an effort to obtain allowance of the original claims.” *Ex parte Eggert*, 67 U.S.P.Q.2d 1716, 2003 WL 21542454, at \*11 (BD. PAT. APP. & INTERF. May 29, 2003), *quoting In re Clement*, 131 F. 3d 1464, 1468 (Fed. Cir. 1997). Analysis of the pending reissue claims using the *Clement* test confirms there is no recapture. The reissue claims are narrower because the mold carrier shape continues to be required, and broader because the claims recite an article of manufacture that corresponds to the machine claims in the patent.

The *Clement* recapture test includes two steps. First, whether the reissue claims are broader than the surrendered subject matter and in what respect. Second, whether those broader aspects of the reissue claims relate to the surrendered subject matter. The second step requires

analysis of the subject matter surrendered and whether the broadening aspect relates to the surrendered subject matter. The court in *Clement* stated the following principles:

(1) if the reissue claim is as broad as or broader than the canceled or amended claim [the surrendered subject matter] in all aspects, the recapture rule bars the claim;

(2) if it is narrower [than the surrendered subject matter] in all aspects, the recapture rule does not apply, but other rejections are possible;

(3) if the reissue claim is broader [than the surrendered subject matter] in some aspects, but narrower [than the surrendered subject matter] in others, then:

(a) if the reissue claim is as broad as or broader in an aspect germane to a prior art rejection, but narrower in another aspect completely unrelated to the rejection, the recapture rule bars the claim;

(b) if the reissue claim is narrower in an aspect germane to [a] prior art rejection, and broader in an aspect unrelated to the rejection, the recapture rule does not bar the claim, but other rejections are possible.

*Eggert* at \*13, quoting *Clement* at 1469-70. Applying the *Clement* test here, the pending reissue claims are an example of principle (3)(b) and the recapture rule therefore does not bar the claims.

**A. The Reissue Claims Are Narrower Than the Surrendered Subject Matter, In an Aspect Germane to the Rejection.**

The reissue claims are narrower because the mold carrier shape continues to be a required characteristic. Under the principles enumerated in *Clement*, category (3)(b) applies, “if the reissue claim is narrower in an aspect germane to [a] prior art rejection, and broader in an aspect unrelated to the rejection” and the recapture rule does not bar the claim. *Eggert* at \*13, *quoting Clement* at 1469-70. Because the mold carrier shape continues to be a required characteristic, the reissue claims are narrower than the surrendered subject matter.

The subject matter surrendered during prosecution of the machine claim was: a device without the enveloping characteristic of the mold carriers. Claim 1 was amended to add the phrase, “which are made in the form of enveloping structures.” Appendix C shows the original claim 1 and the amendment made during prosecution. In traversing the obviousness rejection, the Applicant argued, “neither *Appel* nor *Schavoir* teach or suggest . . . an enveloping mold carrier . . . .” (Amendment at 7). The amendment and traversal of the prior art rejection represents a surrender of a device that does not include the enveloping characteristic of the mold carriers.

The Examiner argues the reissue claims constitute recapture because the mold carrier shape is recited as a characteristic of the shell holders instead of as a separate structural element. “The shift [in the reissue claims] is recapture because the eliminated limitation of the ‘two mold carriers’ [was] the surrendered limitation to overcome a prior art rejection.” (Office Action dated Oct. 10, 2003, at 6). Reference to Appendix C, however, shows that the claim amendment

includes only the mold carrier shape: “made in the form of enveloping structures.” The two mold carriers were already present in the claim.

To support his argument, the Examiner cites *Pannu v. Storz Instruments*, 258 F.3d 1366 (Fed. Cir. 2001). In *Pannu*, the Applicant limited the shape of the claimed haptics by adding the new phrase “continuous, substantially circular arc” to claim 16. *Pannu* at 1371. The reissue claims eliminated the new phrase and instead claimed haptics having a length “substantially greater . . . [to] at least three times greater” than the width. *Id.* at 1372.

The Examiner’s argument that the “two mold carriers” were the surrendered subject matter is not supported by *Pannu* because the haptics in *Pannu* were not surrendered in order to overcome the prior art rejection. Instead, the surrendered subject matter was: any haptics not having the characteristic new shape of a “continuous, substantially circular arc.” The haptics element itself was not the surrendered subject matter in *Pannu*. Only the shape was limited. The haptics were already present in the claim. Thus, the facts of *Pannu* do not support the Examiner’s argument that the “two mold carriers” were surrendered in this case. The two mold carriers were present before and after the amendment.

The reissue claims are narrower than the surrendered subject matter because “shell holders being shaped to be supported by two mold carriers made in the form of enveloping structures” adds the same limitation on the mold carrier shape, now as a characteristic of the shell holders. Appendix D shows a comparison between patent claim 1 and reissue claim 15. (Reissue claims 15, 35, 36, and 39 all include the same mold carrier shape limitation). Because

the characteristic shape is still required, the reissue claims are narrower than the rejected claim in an aspect germane to the prior art rejection.

The distinguishing characteristic of “mold carriers made in the form of enveloping structures” is present in both the patent claim and the reissue claims. The mold carrier shape continues to be required in the reissue claims. The Applicant did not surrender the option of claiming the same invention as an article of manufacture instead of a machine. Because the distinguishing characteristic continues to be required in the reissue claims, and because the mold carrier shape represents the same limitation that was added when the patent claim was amended, the reissue claims are narrower than the surrendered subject matter, in an aspect germane to the prior art rejection.

**B. The Reissue Claims Are Broader Than the Surrendered Subject Matter, In an Aspect Unrelated to the Rejection.**

The reissue claims are broader because they recite an article of manufacture corresponding to the machine claimed in the issued patent. Under the *Clement* recapture test, the first question is whether the reissue claims are broader than the surrendered subject matter and in what respect. *Clement* at 1468. Claiming an invention in a different statutory category is a broadening reissue, *see* MPEP § 1412.02, but in the present case, the shift in statutory category is unrelated to the prior art rejection made during prosecution.

The reissue claims recite the same patentable subject matter as the patent claim, but in a different statutory category. The patent claim recites a “device for manufacturing containers,” which is a machine under 35 U.S.C. § 101.<sup>1</sup> The reissue claims recite a “mold assembly,” which is a manufacture (or article of manufacture) under Section 101.<sup>2</sup>

A patentee may file a reissue application to permit consideration of claims written in a different statutory category where the reissue claims correspond to the patented claims. MPEP § 1412.02 (*see* Appendix G). The following paragraph of Section 1412.02 explains that the consideration of claims, presented in a different category, is proper in a reissue application:

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<sup>1</sup> “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101.

<sup>2</sup> The Examiner argues that the mold assembly is not a separate statutory category, but is a subcombination in relation to the manufacturing device of Claim 1. The Applicant disagrees. The Examiner has cited no support for a conclusion that a subcombination cannot be a separate statutory category. A computer-readable medium containing software, such as a hard drive, is a good example of an article of manufacturer that might be considered a subcombination of a computing machine. *Compare* MPEP § 1412.02, discussed below.



MPEP § 1412.02. Reissue for Article Claims Which Are Functional Descriptive Material Stored on a Computer-Readable Medium.

A patentee may file a reissue application to permit consideration of article of manufacture claims which are functional descriptive material stored on a computer-readable medium, where these article claims correspond to the process or machine claims which have been patented. The error in not presenting claims to this statutory category of invention (the “article” claims) must have been made as a result of error without deceptive intent. The addition of these “article” claims will generally be considered to be a *broadening* of the invention (*Ex parte Wikdahl*, 10 USPQ2d 1546 (Bd. Pat. App. & Inter. 1989)), and such addition must be applied for within two years of the grant of the original patent. See also MPEP § 1412.03 as to broadened claims.

MPEP § 1412.02 (emphasis in original). This paragraph of Section 1412.02 addresses the “statutory category change” situation in terms of seeking article claims (for the code on a drive) that correspond to the patented machine or process claims (for the software process). Similarly, here, the reissue claims being sought are article claims (for the mold assembly) that correspond to the patented machine claims (for the manufacturing device).

In the example described in Section 1412.02, the patented claims for a software process may include several steps, positively recited. For example, a software process claim may include, “storing said value in a database.” The article claims for the “functional descriptive material stored on a computer-readable medium” being sought in reissue may include, “said computer-readable medium configured to store said value in a database.” The step of storing is not positively recited in the article claims. Nevertheless, the medium must be configured to

carry out the storing step. The article claims may be properly sought in a reissue application if the error was made without deceptive intent.

Applying Section 1412.02 to the present case, the patented machine claim for a “device for manufacturing containers” includes several elements, positively recited:

“at least one mold (1) consisting of two half-molds (2) respectively supported by two mold carriers (3) which are made in the form of enveloping structures . . . .”

(U.S. Patent No. 5,968,560, Claim 1; *see* Appendix D). The article claims for the “mold assembly” being sought in reissue include:

“two mold shell holders . . . said shell holders being shaped to be supported by two mold carriers made in the form of enveloping structures . . . .”

(Reissue Application, Claim 15; *see* Appendix D). Like the step of storing in the software example, the two mold carriers are not positively recited in the article claims. Nevertheless, the mold assembly must include shell holders configured to be supported by two mold carriers having an enveloping shape.

The shift in statutory category is unrelated to the prior art rejection made during prosecution for several reasons. First, the Applicant did not surrender the option of seeking corresponding article claims. The article claims may be properly sought in this reissue application because the error of not pursuing claims to the mold assembly article along was made

without deceptive intent. The Reissue Declaration expressly cites the lack of article claims such as “to the mold shells standing alone” as an error sought to be corrected through reissue.

Second, the presentation of article claims cannot be germane to the prior art rejection because the Examiner admitted the article claims are patentable over the prior art many times during prosecution of the reissue application. (First Office Action dated Feb. 28, 2001, at 6; First Notice of Allowability dated March 22, 2001; Second Notice of Allowability dated May 30, 2001; Second Office Action dated March 18, 2002, at 2; Examiner’s second Interview Summary at 3; Examiner’s third Interview Summary at 3). The Applicant and the Examiner agree that all the article claims are patentably distinguishable and allowable over the prior art.

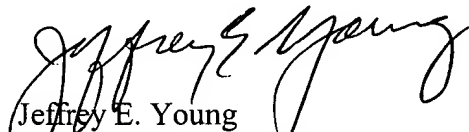
The reissue claims are broader because they claim the invention in a different statutory category. The shift in statutory category is unrelated to the prior art rejection because the option of seeking corresponding article claims was not surrendered.

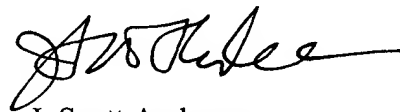
Accordingly, under *Clement* and *Ex parte Eggert*, the requirements of paragraph 3(b) of *Clement* test are satisfied and the recapture rule does not bar the reissue claims.

## 9. APPENDICES

Appendix A attached hereto includes a copy of all claims involved in the appeal. Additional appendices are provided for reference, as listed in the following Table of Appendices.

Respectfully submitted,

  
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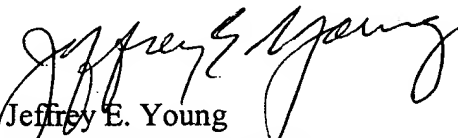
Shana Moore


Accordingly, under *Clement* and *Ex parte Eggert*, the requirements of paragraph 3(b) of *Clement* test are satisfied and the recapture rule does not bar the reissue claims.

## 9. APPENDICES

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Shana Moore

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## **9. APPENDIX A**

### **ALL CLAIMS INVOLVED IN THE APPEAL**

1. Device for manufacturing containers, made of a thermoplastic by blow molding or stretch-blow molding of a preheated preform, the said device including at least one mold (1) consisting of two half-molds (2) respectively supported by two mold carriers (3) which are made in the form of enveloping structures and which can move one with respect to the other, characterized in that each half-mold (2) comprises a shell holder (9) supported by the respective mold carrier (3) and a shell (7) which is provided with a half-impression (8) of the container to be obtained and which can be removably fastened to its shell holder (9) by quick-fixing means (19-23), the shell (7) and the shell holder (9) being in complementary shapes in order to be in at least partial mutual thermal-conduction contact while the pipes and connections for the circulation of cooling and/or heating fluids (11, 12) are provided exclusively in the shell holder.

2. Device according to claim 1, characterized in that the mating faces (14, 15) of the shell (7) and of the shell holder (9) are in total thermal-conduction contact.

3. Device according to claim 1, characterized in that the mating faces (14, 15) of the shell (7) and of the shell holder (9) are in partial thermal-conduction contact by leaving regions of limited thermal conduction.

4. Device according to claim 1, characterized in that the mutually contacting mating faces (14, 15) of the shell (7) and of the shell holder (9) are approximately semicylindrical surfaces of revolution with an axis approximately parallel to the axis of the impression (8) of the container to be manufactured.

5. Device according to claim 1, characterized in that the mutually contacting mating faces (14, 15) of the shell and of the shell holder are provided with axial mutual-positioning means (16, 17).

6. Device according to claim 5, characterized in that the axial mutual-positioning means comprise a system of one or more mating ribs (16) and grooves (17) extending circumferentially.

7. Device according to claim 1, characterized in that the means (19-23) for quickly fixing the shell (7) to the shell holder (9) are provided on their respective parting faces (13, 18).

8. Device according to Claim 4, characterized in that the means (19-23) for quickly fixing the shell and the shell holder are located on their respective edges parallel to the axis of the impression.



9. Device according to claim 8, characterized in that the quick-fixing means (19-23) comprise, on one side, at least one stop for positioning the parting face of the shell with respect to the parting face of the shell holder and, on the other side, quick-screwing means (23) on the parting face (18) of the shell holder (9) with a clamping surface (21) projecting from the parting face (19) of the shell.

10. Device according to claim 9, in which the mold carriers are rotationally pivoted with respect to each other whereby at least one stop is located on the pivot (4) side of the mold carriers (3) and the quick-screwing means are located on the opposite side.

11. Device according to claim 1, characterized in that the shell holder (9) is also provided with members (24) for guiding the half-molds in order to close the mold.

12. Device according to claim 1, characterized in that at least one of the shell holders is equipped with pressure-compensating means suitable for maintaining the sealed closure of the mold during blow molding.

13. Device according to claim 1, characterized in that the shell holders (9) are equipped with a number of fluid pipes, by virtue of which it is possible to create suitable circuits for a given manufacture with a given impression.

14. Device according to claim 1, wherein said containers are bottles.

15. A mold assembly for use in manufacturing molded thermoplastic containers comprising:

two mold shells each containing a half-impression of a substantial portion of the container to be molded;

two mold shell holders each defining a cavity for receiving each said respective mold shell such that each said respective mold shell is in at least partial mutual thermal-conduction contact with its respective shell holder, said shell holders being shaped to be supported by two mold carriers made in the form of enveloping structures movable one with respect to the other; and

at least one quick-fixing locking member by which at least one of said mold shells is removably secured to a respective one of said mold shell holders, said one quick-fixing locking member including a selectively retractable locking member portion.

16. The mold assembly of Claim 15, further comprising at least one axial positioning assembly by which said mold shells are fixed in an axial direction with respect to said mold shell holders.

17. The mold assembly of Claim 16, wherein said axial positioning assembly comprises at least one meshing coupling member disposed on at least one of said mold shells and mold shell holders, and at least one complementary meshing coupling member disposed on at least one of said mold shells and mold shell holders.

18. The mold assembly of Claim 15, wherein said mold shell holders further comprise a number of internal fluid pipes and connections for the circulation of cooling and/or heating fluids.

19. The mold assembly of Claim 15, wherein at least one of said mold shells and/or mold shell holders define at least one cavity at the interface between said mold shells and mold shell holders into which pressurized fluid suitable for maintaining the sealed closures of the mold assembly may be interposed during the molding process.

20. The mold assembly of Claim 17, wherein said meshing coupling members further comprise a system of one or more mating ribs and grooves in said mold shells and mold shell holders.

21. The mold assembly of Claim 15, wherein said quick-fixing locking member comprises, on one side, at least one stop for positioning the parting face of said mold shell with respect to said mold shell holder and, on the other side, at least one quick-acting screw on the parting face of said mold shell holder with at least one clamping surface projecting from the parting face of said mold shell.

34. The mold assembly as claimed in Claim 15, wherein said quick-fixing locking member is configured to include a portion which remains engaged with said mold shell holder when said quick fixing locking member is moved out of said locking position.

35. A mold assembly for use in manufacturing molded thermoplastic containers

comprising:

two mold shells each containing a half-impression of a substantial portion of the container to be molded;

two mold shell holders each defining a cavity for receiving each said respective mold shell such that each said respective mold shell is in at least partial mutual thermal-conduction contact with its respective shell holder, said shell holders being shaped to be supported by two mold carriers made in the form of enveloping structures movable one with respect to the other; and

at least one quick-fixing locking member by which at least one of said mold shells is removably secured to a respective one of said mold shell holders, said quick-fixing locking member itself including a retractable locking member portion which can be selectively extended and retracted such that when extended, said retractable locking member portion provides at least partial securement of said one of said mold shells relative to said corresponding mold shell holder, and when retracted, said retractable locking member portion does not provide securement of said one said mold shells relative to said corresponding mold shell holder.

36. A mold assembly for use in manufacturing molded thermoplastic containers comprising:
- two mold shells each containing a half-impression of a substantial portion of the container to be molded;
- two mold shell holders each defining a cavity for receiving each said respective mold shell such that each said respective mold shell is in at least partial mutual thermal-conduction contact with its respective shell holder, said shell holders being shaped to be supported by two mold carriers made in the form of enveloping structures movable one with respect to the other; and
- at least one quick-fixing locking member by which at least one of said mold shells is removably secured to a respective one of said mold shell holders, said one quick-fixing locking member including a selectively movable locking member portion which can be selectively moved into and out of a locking position which at least partially locks said one of said mold shells to said respective mold shell holder, and said quick-fixing locking member is configured to include a portion which remains engaged with said mold shell holder when said quick fixing locking member is moved out of said locking position.

37. The mold assembly as claimed in Claim 36, wherein said quick-fixing locking member comprises the following portions:  
a fastener portion; and  
said selectively movable locking member portion,  
said fastener portion and said selectively movable locking member portion being separate but configured to interact such that said fastener portion remains engaged with said mold shell holder when said locking member portion is moved out of said locking position.

38. The mold assembly as claimed in Claim 37, wherein said fastener portion is threadably engaged with said mold shell holder through a threaded connection that can be partially loosened without disengagement to allow said locking member portion to be moved out of said locking position.

39. A mold assembly for use in manufacturing molded thermoplastic containers comprising:

two mold shells each containing a half-impression of a substantial portion of the container to be molded;

two mold shell holders each defining a cavity for receiving each said respective mold shell such that each said respective mold shell is in at least partial mutual thermal-conduction contact with its respective shell holder, said shell holders being shaped to be supported by two mold carriers made in the form of enveloping structures movable one with respect to the other; and

at least one quick-fixing, slidable lock by which at least one of said mold shells is removably secured to a respective one of said mold shell holders, said slidable lock being slidable into and out of a locking position which at least partially locks said one of said mold shells relative to said respective mold shell holder.

40. The mold assembly as claimed in Claim 39, wherein said quick-fixing, slidable lock is configured to include a portion which remains engaged with said mold shell holder when another portion of said quick fixing locking member is moved out of said locking position.



## **APPENDIX B**

### **ALL CLAIMS INVOLVED IN THE APPEAL**

#### **(WITH STATUS IDENTIFIERS, SHOWING AMENDMENTS)**

1. Device for manufacturing containers, made of a thermoplastic by blow molding or stretch-blow molding of a preheated preform, the said device including at least one mold (1) consisting of two half-molds (2) respectively supported by two mold carriers (3) which are made in the form of enveloping structures and which can move one with respect to the other, characterized in that each half-mold (2) comprises a shell holder (9) supported by the respective mold carrier (3) and a shell (7) which is provided with a half-impression (8) of the container to be obtained and which can be removably fastened to its shell holder (9) by quick-fixing means (19-23), the shell (7) and the shell holder (9) being in complementary shapes in order to be in at least partial mutual thermal-conduction contact while the pipes and connections for the circulation of cooling and/or heating fluids (11, 12) are provided exclusively in the shell holder.

2. Device according to claim 1, characterized in that the mating faces (14, 15) of the shell (7) and of the shell holder (9) are in total thermal-conduction contact.

3. Device according to claim 1, characterized in that the mating faces (14, 15) of the shell (7) and of the shell holder (9) are in partial thermal-conduction contact by leaving regions of limited thermal conduction.

4. Device according to claim 1, characterized in that the mutually contacting mating faces (14, 15) of the shell (7) and of the shell holder (9) are approximately semicylindrical surfaces of revolution with an axis approximately parallel to the axis of the impression (8) of the container to be manufactured.

5. Device according to claim 1, characterized in that the mutually contacting mating faces (14, 15) of the shell and of the shell holder are provided with axial mutual-positioning means (16, 17).

6. Device according to claim 5, characterized in that the axial mutual-positioning means comprise a system of one or more mating ribs (16) and grooves (17) extending circumferentially.

7. Device according to claim 1, characterized in that the means (19-23) for quickly fixing the shell (7) to the shell holder (9) are provided on their respective parting faces (13, 18).

8. Device according to Claim 4, characterized in that the means (19-23) for quickly fixing the shell and the shell holder are located on their respective edges parallel to the axis of the impression.

9. Device according to claim 8, characterized in that the quick-fixing means (19-23) comprise, on one side, at least one stop for positioning the parting face of the shell with respect to the parting face of the shell holder and, on the other side, quick-screwing means (23) on the parting face (18) of the shell holder (9) with a clamping surface (21) projecting from the parting face (19) of the shell.

10. Device according to claim 9, in which the mold carriers are rotationally pivoted with respect to each other whereby at least one stop is located on the pivot (4) side of the mold carriers (3) and the quick-screwing means are located on the opposite side.

11. Device according to claim 1, characterized in that the shell holder (9) is also provided with members (24) for guiding the half-molds in order to close the mold.

12. Device according to claim 1, characterized in that at least one of the shell holders is equipped with pressure-compensating means suitable for maintaining the sealed closure of the mold during blow molding.

13. Device according to claim 1, characterized in that the shell holders (9) are equipped with a number of fluid pipes, by virtue of which it is possible to create suitable circuits for a given manufacture with a given impression.

14. Device according to claim 1, wherein said containers are bottles.

15. **[Filed with Re-Issue Application; Amended Once]** A mold assembly for use in manufacturing molded thermoplastic containers comprising:

two mold shells each containing a half-impression of a substantial portion of the container to be molded;

two mold shell holders each defining a cavity for receiving each said respective mold shell such that each said respective mold shell is in at least partial mutual thermal-conduction contact with its respective shell holder, said shell holders being shaped to be supported by two mold carriers made in the form of enveloping structures movable one with respect to the other; and

at least one quick-fixing locking member by which at least one of said mold shells is [are] removably secured to a respective one of said mold shell holders, said one quick-fixing locking member including a selectively retractable locking member portion.

16. **[Filed with Re-Issue Application]** The mold assembly of Claim 15, further comprising at least one axial positioning assembly by which said mold shells are fixed in an axial direction with respect to said mold shell holders.

17. **[Filed with Re-Issue Application]** The mold assembly of Claim 16, wherein said axial positioning assembly comprises at least one meshing coupling member disposed on at least one of said mold shells and mold shell holders, and at least one complementary meshing coupling member disposed on at least one of said mold shells and mold shell holders.

18. **[Filed with Re-Issue Application]** The mold assembly of Claim 15, wherein said mold shell holders further comprise a number of internal fluid pipes and connections for the circulation of cooling and/or heating fluids.

19. **[Filed with Re-Issue Application]** The mold assembly of Claim 15, wherein at least one of said mold shells and/or mold shell holders define at least one cavity at the interface between said mold shells and mold shell holders into which pressurized fluid suitable for maintaining the sealed closures of the mold assembly may be interposed during the molding process.

20. **[Filed with Re-Issue Application]** The mold assembly of Claim 17, wherein said meshing coupling members further comprise a system of one or more mating ribs and grooves in said mold shells and mold shell holders.

21. **[Filed with Re-Issue Application]** The mold assembly of Claim 15, wherein said quick-fixing locking member comprises, on one side, at least one stop for positioning the parting face of said mold shell with respect to said mold shell holder and, on the other side, at least one quick-acting screw on the parting face of said mold shell holder with at least one clamping surface projecting from the parting face of said mold shell.

34. [New] The mold assembly as claimed in Claim 15, wherein said quick-fixing locking member is configured to include a portion which remains engaged with said mold shell holder when said quick fixing locking member is moved out of said locking position.

35. [New; Amended Once] A mold assembly for use in manufacturing molded thermoplastic containers comprising:

two mold shells each containing a half-impression of a substantial portion of the container to be molded;

two mold shell holders each defining a cavity for receiving each said respective mold shell such that each said respective mold shell is in at least partial mutual thermal-conduction contact with its respective shell holder, said shell holders being shaped to be supported by two mold carriers made in the form of enveloping structures movable one with respect to the other; and

at least one quick-fixing locking member by which at least one of said mold shells is removably secured to a respective one of said mold shell holders, said quick-fixing locking member itself including a retractable locking member portion which can be selectively extended and retracted such that when extended, said retractable locking member portion provides at least partial securement of said one of said mold shells relative to said corresponding mold shell holder, and when retracted, said retractable locking member portion does not provide securement of said one said mold shells relative to said corresponding mold shell holder.

36. [New; Amended Once] A mold assembly for use in manufacturing molded thermoplastic containers comprising:

two mold shells each containing a half-impression of a substantial portion of the container to be molded;

two mold shell holders each defining a cavity for receiving each said respective mold shell such that each said respective mold shell is in at least partial mutual thermal-conduction contact with its respective shell holder, said shell holders being shaped to be supported by two mold carriers made in the form of enveloping structures movable one with respect to the other; and

at least one quick-fixing locking member by which at least one of said mold shells is removably secured to a respective one of said mold shell holders, said one quick-fixing locking member including a selectively movable locking member portion which can be selectively moved into and out of a locking position which at least partially locks said one of said mold shells to said respective mold shell holder, and said quick-fixing locking member is configured to include a portion which remains engaged with said mold shell holder when said quick fixing locking member is moved out of said locking position.



37. [New] The mold assembly as claimed in Claim 36, wherein said quick-fixing locking member comprises the following portions:

- a fastener portion; and
- said selectively movable locking member portion,

said fastener portion and said selectively movable locking member portion being separate but configured to interact such that said fastener portion remains engaged with said mold shell holder when said locking member portion is moved out of said locking position.

38. [New] The mold assembly as claimed in Claim 37, wherein said fastener portion is threadably engaged with said mold shell holder through a threaded connection that can be partially loosened without disengagement to allow said locking member portion to be moved out of said locking position.

39. [New; Amended Once] A mold assembly for use in manufacturing molded thermoplastic containers comprising:

two mold shells each containing a half-impression of a substantial portion of the container to be molded;

two mold shell holders each defining a cavity for receiving each said respective mold shell such that each said respective mold shell is in at least partial mutual thermal-conduction contact with its respective shell holder, said shell holders being shaped to be supported by two mold carriers made in the form of enveloping structures movable one with respect to the other; and

at least one quick-fixing, slidable lock by which at least one of said mold shells is removably secured to a respective one of said mold shell holders, said slidable lock being slidable into and out of a locking position which at least partially locks said one of said mold shells relative to said respective mold shell holder.

40. [New] The mold assembly as claimed in Claim 39, wherein said quick-fixing, slidable lock is configured to include a portion which remains engaged with said mold shell holder when another portion of said quick fixing locking member is moved out of said locking position.

## APPENDIX C

Original Independent Claim 1 of the '089  
Application Read as Follows:

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Device for manufacturing containers, in particular bottles, made of a thermoplastic by blow molding or stretch-blow molding of a preheated preform,

the said device including at least one mold (1) consisting of two half-molds (2) respectively supported by two mold carriers (3) which can move one with respect to the other, characterized in that each half-mold (2) comprises

a shell holder (9) supported by the respective mold carrier (3) and

a shell (7) which is provided with a half-impression (8) of the container to be obtained and which can be removably fastened to its shell holder (9) by quick-fixing means (19-23),

the shell (7) and the shell holder (9) being of complementary shapes in order to be in at least partial mutual thermal-conduction contact while the pipes and connections for the circulation of cooling and/or heating fluids (11, 12) are provided exclusively in the shell holder.

Independent Claim 1 after the only  
Amendment in the '089 Application and Issued  
as Claim 1 of the '560 Patent (deletions in  
strikeout; additions in bold):

---

Device for manufacturing containers, in particular ~~bottles~~, made of a thermoplastic by blow molding or stretch-blow molding of a preheated preform,

the said device including at least one mold (1) consisting of two half-molds (2) respectively supported by two mold carriers (3) **which are made in the form of enveloping structures** and which can move one with respect to the other, characterized in that each half-mold (2) comprises

a shell holder (9) supported by the respective mold carrier (3) and

a shell (7) which is provided with a half-impression (8) of the container to be obtained and which can be removably fastened to its shell holder (9) by quick-fixing means (19-23),

the shell (7) and the shell holder (9) being of complementary shapes in order to be in at least partial mutual thermal-conduction contact while the pipes and connections for the circulation of cooling and/or heating fluids (11, 12) are provided exclusively in the shell holder.

## APPENDIX D

Issued Claim 1 of the '560 Patent  
(amendments shown; deletions in strikeout;  
additions in bold):

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Device for manufacturing containers, ~~in particular bottles,~~ made of a thermoplastic by blow molding or stretch-blow molding of a preheated preform, the said device including

at least one mold (1) consisting of two half-molds (2) respectively supported by two mold carriers (3) **which are made in the form of enveloping structures** and which can move one with respect to the other,

characterized in that each half-mold (2) comprises

a shell holder (9) supported by the respective mold carrier (3) and

a shell (7) which is provided with a half-impression (8) of the container to be obtained and which can be removably fastened to its shell holder (9) by quick-fixing means (19-23),

the shell (7) and the shell holder (9) being of complementary shapes in order to be in at least partial mutual thermal-conduction contact while the pipes and connections for the circulation of cooling and/or heating fluids (11, 12) are provided exclusively in the shell holder.

New Claim 15 of the Reissue Application,  
after Amendment, compared to Issued Claim 1  
(addition in bold):

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A mold assembly for use in manufacturing molded thermoplastic containers comprising:

two mold shells each containing a half-impression of a substantial portion of the container to be molded;

two mold shell holders each defining a cavity for receiving each said respective mold shell such that each said respective mold shell is in at least partial mutual thermal-conduction contact with its respective shell holder, **said shell holders being shaped to be supported by two mold carriers made in the form of enveloping structures** movable one with respect to the other; and

at least one quick-fixing locking member by which at least one of said mold shells is removably secured to a respective one of said mold shell holders, said one quick-fixing locking member including a selectively retractable locking member portion.

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of

BRIERE et al.

Application No.: 08/945,089

Filed: October 17, 1997

For: DEVICE FOR PRODUCING THERMOPLASTIC CONTAINERS  
BY A BLOW-MOLDING OR STRETCH BLOW MOLDING PROCESS

Group Art Unit: 1722

Examiner: Robert Davis

AMENDMENT UNDER 37 C.F.R. § 1.115

ATTN: BOX  
Assistant Commissioner of Patents  
Washington, D.C. 20231

Dear Sir:

This Amendment is in response to the Office Action dated June 26, 1998. The period of response expires on or before September 26, 1998.

Please amend the above-identified application as follows:

In the Abstract:

Please insert into this application the attached Abstract of the Disclosure.

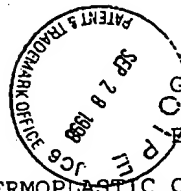
In the specification:

Page 5, between lines 28 and 29, insert "Figure 4 is a view from left, partially cutaway, of the device of Figure 1".

Page 8, line 10, replace "Figure 3" with "Figure 2";

line 14, replace "two ribs 18" with "two ribs 16".

Page 9, lines 20-22, replace "the rear face equipped with a chamber and with an O-ring seal for pressure compensation (seal not shown in the drawings), etc." with "the rear face provided with a



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B3  
chamber 26 and with an O-ring seal 27 for compensation as shown in figure 4."

In the claims:

B4  
Claim 1. (amended) Device for manufacturing containers, [in particular bottles,] made of a thermoplastic by blow molding or stretch-blow molding of a preheated preform, the said device including at least one mold (1) consisting of two half-molds (2) respectively supported by two mold carriers (3) which are made in the form of enveloping structures and which can move one with respect to the other, characterized in that each half-mold (2) comprises a shell holder (9) supported by the respective mold carrier (3) and a shell (7) which is provided with a half-impression (8) of the container to be obtained and which can be removably fastened to its shell holder (9) by quick-fixing means (19-23), the shell (7) and the shell holder (9) being in complementary shapes in order to be in at least partial mutual thermal-conduction contact while the pipes and connections for the circulation of cooling and/or heating fluids (11, 12) are provided exclusively in the shell holder.

B5C  
Claim 10. (amended) Device according to Claim 9, in which the mold carriers are rotationally pivoted with respect to each other ~~in order to form a~~ "jackknife"-type mold, characterized in that whereby at least one stop is located on the pivot (4) side of the

AMENDMENT UNDER 37 C.F.R. §1.115  
U.S. Appl. No. 08/945,089

BB mold carriers (3) and the quick-screwing means are located on the opposite side.

REMARKS

Allowance of this application, as amended, is respectfully requested.

Attached hereto please find enclosed herewith the English translation of the abstract of disclosure. This correction meets the requirements of 37 CFR § 1.72(b).

The Examiner's acknowledgement of Applicant's claim for priority, and receipt of the priority document from the International Bureau are noted.

In response to the objection to the drawings, a further drawing page is being submitted separately in accordance with MPEP § 608.02 which contains new figure 4 in which the O-ring seal is shown. A preferred embodiment for the pressure compensation means of the instant invention is a chamber and O-ring seal.

A. Rejection of claims 1-13 under 35 USC § 112.

The Office Action indicates that Claims 1-13 are indefinite because in the present instance, Claim 1 recites the broad recitation of containers, and the claim also recites in particularly bottles which is the narrower statement of the range/limitation.

In response, Claim 1 has been amended for clarity to delete the reference to bottles. Applicants do not intend to surrender

this subject matter (bottles) from Claim 1 and any appropriate dependent claim.

The Office Action also indicates that on line 3 of Claim 10, the phrase "jackknife"-type mold is indefinite, and that the word "type" when appended to an otherwise definite expression extends the scope of expression to render it indefinite.

The phrase "in order to form a "jackknife"-type mold" has not been deleted from the claims again for clarification purposes. Applicants also do not intend to surrender this subject matter (jackknife-type molds), the meaning of which would be apparent to one skilled in the art from Claim 10 or any other claim, as appropriate.

Applicant's respectfully submit that rejection of the claims are obviated in view of the aforementioned amendments.

B. Rejection of Claims 1, 2, 4, 7, 8 and 13 under 37 CFR 103(a) in view of Appel et al. ("Appel", 4,072,456) in combination with Schavoir (1,409,591).

The Office Action states that Claims 1, 2, 4, 7, 8, and 13 are rejected over the combination of Appel and Schavoir because it would have been obvious to modify the apparatus of Appel by having an insert in thermal conduction contact with a mold support by quick fixing means as disclosed by Schavoir. Accordingly, the thermal conduction contact provides a much cleaner operation than the cooling channel of Appel which must be emptied of liquid before



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U.S. Appln. No. 08/945,089

exchanging inserts. Further, it would have been obvious to use the quick fixing means to decrease the down time of the apparatus while changing mold inserts to form differently shaped articles.

The rejection of claims 1,2,4,7,8, and 13 as being unpatentable over Appel in view of Schavoir is respectfully traversed. Applicant's submit that not only does the presently claimed invention patentably distinguish over each of the cited references, but that the applied combination does not render obvious the presently claimed invention. The difference between the disclosures of the cited references and the presently claimed invention, are discussed in further detail.

To properly establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Additionally, the references, when combined, must teach or suggest all of the claims limitations. Finally, the teaching or suggestion to modify the reference must be found in the prior art, and not based on the applicant's disclosure.

Amended claim 1 defines a structure provided with mold carriers 3 which envelop or surround shell holders 9, wherein mold-carriers 3 are movable one with respect to the other, and in which shell holders 9 support a shell 7.

Furthermore, shells 7 and respective shell holders 9 are arranged as mentioned in lines 15-20 of present claim 1.

In contrast, APPEL recites a structure in which mold-carriers 43, 44 (see fig.12) are movable one with respect to the other due to associated axis 118, 119 and arms 120, 121, and in which said mold-carriers carry respective half-molds. Furthermore, fluid flows are provided between each mold-carrier and the respective half-mold.

Consequently, APPEL does not teach or suggest a device with mold-carriers which sound respective shell holders.

Moreover, even if one imagines that elements 43, 44 in APPEL are shell holders, that elements, 130, 131 are shells and that elements (axis and arms 118-121) are mold-carriers, such an argument would be erroneous from a structural point of view. This is true for at least the reason that the above mentioned elements are obviously pivot elements corresponding to axis 4 of the present invention.

Moreover, even assuming arguendo that rods 118-119 are mold-carriers, said rods are surely not surrounding elements, and they cannot provide rigidity, contrary to standard mold-carriers.

In view of the foregoing, Applicants respectfully submit that the present claimed invention is not anticipated or rendered prima facie obvious by Appel.

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Schavoir recites only a complicated mold carrier structure (provided with chambers, groove,...) in which molds 22 are carried. Consequently Schavior corresponds to a substantially classical apparatus, and does not rectify the deficiencies noted above in Appel.

In sum, neither Appel nor Schavoir teach or suggest a device including a three-part structure, i.e., including

- an enveloping mold carrier
- a shell holder
- a shell.

Accordingly, Applicants respectfully submit that the present claimed invention is not anticipated or rendered prima facie obvious by Appel and/or Schavoir.

C. Rejection of Claims 5 and 6 under 37 CFR 103(a) in view of Appel et al. (4,072,456) in combination with Schavoir (1,409,591) and Turner et al. ("Turner", 3,753,641).

The Office Action indicates that the combination of Appel and Schavoir disclose all claimed features except for the use of positioning means between the shell and mold. The Examiner relies on Turner for disclosing a blow mold having a shell (21) and a supporting mold (10) wherein a ledge as shown in figure 2 positions the parts in respect to one another.

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Applicant's submit that the instant claims are not obvious in view of the combined art teachings of Appel and Schavoir, and that the deficiencies of the combined art are not overcome by the Examiner's reference to Turner. Accordingly, withdrawal of this rejection is requested.

D. Rejection Claim 11 under 37 CFR 103(a) in view of Appel et al. (4,072,456) in combination with Schavoir (1,409,591) and Abramatt (5,332,384).

The Office Action indicates that the combination of Appel and Schavoir disclose all claimed features except for the means for guiding the mold halves together. The Examiner relies on Abramatt for disclosing such means. (20, 30) for aligning opposing mold halves.


Applicant's submit that the instant claims are not obvious in view of the combined art teachings of Appel and Schavoir, and that the Examiner's further reference to Abramatt does not overcome the deficiencies of their disclosures. Accordingly, withdrawal of this rejection is requested.

Applicant's respectfully submit that in view of the amendments to the claims and the foregoing remarks and analysis, the claims presently pending in the application comply with all statutory requirements, and are now in condition for immediate allowance. Early favorable action is earnestly solicited.

AMENDMENT UNDER 37 C.F.R. §1.115  
U.S. Appln. No. 08/945,089

An inquiry concerning this communication should be directed to  
the undersigned at the telephone number listed below.

Respectfully submitted,

  
\_\_\_\_\_  
John T. Callahan  
Reg. No. 32,607

SUGHRUE, MION, ZINN, MACPEAK  
& SEAS  
2100 Pennsylvania Avenue, N.W.  
Washington, D.C. 20037-3202  
Phone: (202) 293-7060  
FAX: (202) 293-7860

Date: September 28, 1998

The original patent specification discloses that composition X is not suitable (or not satisfactory) for molding an item because composition X fails to provide quick drying. After the patent issues, it is found that composition X would be desirable for the molding in spite of the failure to provide quick drying, because of some other newly recognized benefit from composition X. A claim to composition X or a method of use thereof would not be permitted in a reissue application, because the original patent specification contained an explicit statement of intent *not* to claim composition X or a method of use thereof.

In most instances, however, the mere failure to claim a disclosed embodiment in the original patent (absent an explicit statement in the original patent specification of unsuitability of the embodiment) would **not** be grounds for prohibiting a claim to that embodiment in the reissue.

## 1412.02 Recapture of Canceled Subject Matter

A reissue will not be granted to "recapture" claimed subject matter which was surrendered in an application to obtain the original patent. *Hester Industries, Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); *In re Clement*, 131 F.3d 1464, 45 USPQ2d 1161 (Fed. Cir. 1997); *Ball Corp. v. United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984); *In re Wadlinger*, 496 F.2d 1200, 181 USPQ 826 (CCPA 1974); *In re Richman*, 409 F.2d 269, 276, 161 USPQ 359, 363-364 (CCPA 1969); *In re Willingham*, 282 F.2d 353, 127 USPQ 211 (CCPA 1960).

### TWO STEP TEST FOR RECAPTURE:

In *Clement*, 131 F.3d at 1468-69, 45 USPQ2d at 1164, the Court of Appeals for the Federal Circuit set forth guidance for recapture as follows:

The first step in applying the recapture rule is to determine whether and in what aspect the reissue claims are broader than the patent claims. For example, a reissue claim that deletes a limitation or element from the patent claims is broader in that limitation's aspect.... Under *Mentor [Mentor Corp. v. Coloplast, Inc.]*, 998 F.2d 992, 994, 27 USPQ2d 1521, 1524 (Fed. Cir. 1993)], courts must determine in which aspects the reissue claim is broader, which includes broadening as a result of an omitted limitation....

The second step is to determine whether the broader aspects of the reissue claims relate to surrendered subject matter. To determine whether an applicant surrendered particular subject matter, we look to the prosecution history for arguments and changes to the claims made in an effort to overcome a prior art rejection. See *Mentor*, 998 F.2d at 995-96, 27 USPQ2d at 1524-25; *Ball Corp. v. United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 294-95 (Fed. Cir. 1984).

In every reissue application, the examiner must first review each claim for the presence of broadening, as compared with the scope of the claims of the patent to be reissued. A reissue claim is broadened where some limitation of the patent claims is no longer required in the reissue claim; see MPEP § 1412.03 for guidance as to the nature of a "broadening claim."

Where a claim in a reissue application is in fact broadened, the examiner must next determine whether the broader aspects of that reissue claim relate to subject matter that applicant previously surrendered during the prosecution of the original application (which became the patent to be reissued). Each limitation of the patent claims, which is omitted or broadened in the reissue claim, must be reviewed for this determination.

### CRITERIA FOR DETERMINING THAT SUBJECT MATTER HAS BEEN SURRENDERED:

If the limitation now being omitted or broadened in the present reissue was originally presented/argued/stated in the original application to make the claims allowable over a rejection or objection made in the original application, the omitted limitation relates to subject matter previously surrendered by applicant, and impermissible recapture exists. See MPEP § 706.02(1)(1) with respect to amendments made to distinguish the claimed invention from 35 U.S.C. 102(e)/103 prior art which was commonly owned or assigned at the time the invention was made.

The examiner should review the prosecution history of the original application file (of the patent to be reissued) for recapture. The prosecution history includes the rejections and applicant's arguments made therein. The record of the original application must show that the broadening aspect (the omitted/broadened limitation(s)) relates to subject matter that applicant previously surrendered.

**Example**

(A) A limitation of the patent claims is omitted in the reissue claims. This omission provides a broadening aspect in the reissue claims, as compared to the claims of the patent. The omitted limitation was originally argued in the original application to make the application claims allowable over a rejection or objection made in the application. Thus, the omitted limitation relates to subject matter previously surrendered, in the original application.

Note: The argument that the claim limitation defined over the rejection must have been specific as to the limitation; rather than a general statement regarding the claims as a whole. In other words, a general "boiler plate" sentence will not be sufficient to establish recapture. An example of one such "boiler plate" sentence is:

In closing, it is argued that the limitations of claims 1-7 distinguish the claims from the teachings of the prior art, and claims 1-7 are thus patentable.

This type of general "argument" will not, by itself, be sufficient to establish surrender and recapture.

**Example**

(B) The limitation omitted in the reissue was added in the original application claims for the purpose of making the claims allowable over a rejection or objection made in the application. Even though applicant made no argument on the record that the limitation was added to obviate the rejection, the nature of the addition to the claim can show that the limitation was added in direct reply to the rejection. This too will establish the omitted limitation as relating to subject matter previously surrendered. To illustrate this, note the following example:

The original application claims recite limitations A+B+C, and the Office action rejection combines two references to show A+B+C. In the amendment replying to the Office action, applicant adds limitation D to A+B+C in the claims, but makes no argument as to that addition. The examiner then allows the claims. Even though there is no argument as to the addition of limitation D, it must be presumed that the D limitation was added to obviate the rejection. The subsequent deletion of (omission of) limitation D in the reissue claims would be presumed to be a broadening in an aspect of the reissue claims related to surrendered subject matter.

**Example**

(C) The limitation A omitted in the reissue claims was present in the claims of the original application. The examiner's reasons for allowance in the original application stated that it was that limitation A which distinguished over a potential combination of references X and Y. Applicant did not present on the record a counter statement or comment as to the examiner's reasons for allowance, and permitted the claims to issue. The omitted limitation is thus established as relating to subject matter previously surrendered.

### **ARGUMENT (WITHOUT AMENDMENT TO THE CLAIMS) IN THE ORIGINAL APPLICATION MAY BE SUFFICIENT TO ESTABLISH RECAPTURE:**

In *Clement*, the recapture was directed to subject matter surrendered in the original application by changes made to the claims (i.e., amendment of the claims) in an effort to overcome a prior art rejection. The *Clement* Court, however, also stated that "[t]o determine whether an applicant surrendered particular subject matter, we look to the prosecution history for arguments and changes to the claims made in an effort to overcome a prior art rejection." [Emphasis added] 131 F.3d at 1469, 45 USPQ2d at 1164. This statement in *Clement* was subsequently discussed in *Hester Indus., Inc. v. Stein, Inc., supra*, where the Court observed that surrender of claimed subject matter may occur by *arguments* made during the prosecution of the original patent application *even where there was no claim change made*. The Court in *Hester* held that the surrender which forms the basis for impermissible recapture "can occur through arguments alone." 142 F.3d at 1482, 46 USPQ2d at 1649. Accordingly, where claims are broadened in a reissue application, the examiner should review the prosecution history of the original patent file for recapture, even where the claims were never amended during the prosecution of the application which resulted in the patent.

### **REISSUE CLAIMS HAVE SAME OR BROADER SCOPE IN ALL ASPECTS:**

The recapture rule bars the patentee from acquiring through reissue claims that are, in all aspects, of the same scope as, or are broader in scope than, those claims canceled from the original application to

obtain a patent. *Ball*, 729 F.2d at 1436, 221 USPQ at 295.

### REISSUE CLAIMS ARE NARROWER IN SCOPE IN ALL ASPECTS:

The patentee is free to acquire, through reissue, claims that are narrower in scope in all aspects than claims canceled from the original application to obtain a patent. If the reissue claims are narrower than the claims canceled from the original application, yet broader than the original patent claims, reissue must be sought within 2 years after the grant of the original patent. *Ball*, 729 F.2d at 1436, 221 USPQ at 295. See MPEP § 1412.03 as to broadening claims.

### REISSUE CLAIMS ARE BROADER IN SCOPE IN SOME ASPECTS, BUT NARROWER IN OTHERS:

Reissue claims that are broader in certain aspects and narrower in others *vis-à-vis* claims canceled from the original application to obtain a patent may avoid the effect of the recapture rule if the claims are broader in a way that does not attempt to reclaim what was surrendered earlier. *Mentor Corp. v. Coloplast, Inc.*, 998 F.2d 992, 994, 27 USPQ2d 1521, 1525 (Fed. Cir. 1993). "[I]f the reissue claim is as broad as or broader in an aspect germane to a prior art rejection, but narrower in another aspect completely unrelated to the rejection, the recapture rule bars the claim; [] if the reissue claim is narrower in an aspect germane to [a] prior art rejection, and broader in an aspect unrelated to the rejection, the recapture rule does not bar the claim, but other rejections are possible." *Clement*, 131 F.3d at 1470, 45 USPQ2d at 1165.

If the broadening aspect of the reissue claim relates to subject matter previously surrendered, the examiner must determine whether the newly added narrowing limitation in the reissue claim modifies the claim such that the scope of the claim no longer results in a recapture of the surrendered subject matter. If the narrowing limitation modifies the claim in such a manner that the scope of the claim no longer results in a recapture of the surrendered subject matter, then there is no recapture. In this situation, even though a rejection based on recapture is not made, the examiner should make of record the reason(s) why, as a result of the narrowing limitation, there is no recapture.

### REISSUE TO TAKE ADVANTAGE OF 35 U.S.C. 103(b):

A patentee may file a reissue application to permit consideration of process claims which qualify for 35 U.S.C. 103(b) treatment if a patent is granted on an application entitled to the benefit of 35 U.S.C. 103(b), without an election having been made as a result of error without deceptive intent. See MPEP § 706.02(n). This is not to be considered a recapture. The addition of process claims, however, will generally be considered to be a *broadening* of the invention (*Ex parte Wikdahl*, 10 USPQ2d 1546 (Bd. Pat. App. & Inter. 1989)), and such addition must be applied for within two years of the grant of the original patent. See also MPEP § 1412.03 as to broadened claims.

### REISSUE FOR ARTICLE CLAIMS WHICH ARE FUNCTIONAL DESCRIPTIVE MATERIAL STORED ON A COMPUTER-READABLE MEDIUM:

A patentee may file a reissue application to permit consideration of article of manufacture claims which are functional descriptive material stored on a computer-readable medium, where these article claims correspond to the process or machine claims which have been patented. The error in not presenting claims to this statutory category of invention (the "article" claims) must have been made as a result of error without deceptive intent. The addition of these "article" claims will generally be considered to be a *broadening* of the invention (*Ex parte Wikdahl*, 10 USPQ2d 1546 (Bd. Pat. App. & Inter. 1989)), and such addition must be applied for within two years of the grant of the original patent. See also MPEP § 1412.03 as to broadened claims.

### REJECTION BASED UPON RECAPTURE:

Reissue claims which recapture surrendered subject matter should be rejected using form paragraph 14.17.

#### ¶ 14.17 Rejection, 35 U.S.C. 251, Recapture

Claim[1] rejected under 35 U.S.C. 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. See *Hester Industries, Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); *In re Clement*, 131 F.3d 1464, 45 USPQ2d 1161 (Fed. Cir. 1997); *Ball Corp. v. United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984). A broaden-



ing aspect is present in the reissue which was not present in the application for patent. The record of the application for the patent shows that the broadening aspect (in the reissue) relates to subject matter that applicant previously surrendered during the prosecution of the application. Accordingly, the narrow scope of the claims in the patent was not an error within the meaning of 35 U.S.C. 251, and the broader scope surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application.

[2]

#### Examiner Note:

In bracket 2, the examiner should explain the specifics of why recapture exists, including an identification of the omitted/broadened claim limitations in the reissue which provide the "broadening aspect" to the claim(s), and where in the original application the narrowed claim scope was presented/argued to obviate a rejection/objection. See MPEP § 1412.02.

### 1412.03 Broadening Reissue Claims

35 U.S.C. 251 prescribes a 2-year limit for filing applications for broadening reissues:

No reissue patent shall be granted enlarging the scope of the original patent unless applied for within two years from the grant of the original patent.

#### MEANING OF "BROADENED REISSUE CLAIM"

A broadened reissue claim is a claim which enlarges the scope of the claims of the patent, *i.e.*, a claim which is greater in scope than each and every claim of the original patent. If a disclaimer is filed in the patent prior to the filing of a reissue application, the disclaimed claims are not part of the "original patent" under 35 U.S.C. 251. The Court in *Vecira Fitness Inc. v. TNWK Corp.*, 49 USPQ2d 1144, 1147, 162 F.3d 1379, 1383 (Fed. Cir. 1998) held that a reissue application violated the statutory prohibition under 35 U.S.C. 251 against broadening the scope of the patent more than 2 years after its grant because the reissue claims are broader than the claims that remain after the disclaimer, even though the reissue claims are narrower than the claims that were disclaimed by the patentee before reissue. The reissue application was bounded by the claims remaining in the patent after a disclaimer is filed.

A claim of a reissue application enlarges the scope of the claims of the patent if it is broader in *at least*

*one* respect, even though it may be narrower in other respects.

A claim in the reissue which includes subject matter not covered by the patent claims enlarges the scope of the patent claims. For example, if any amended or newly added claim in the reissue contains within its scope any conceivable product or process which would not have infringed the patent, then that reissue claim would be broader than the patent claims. *Tillorson, Ltd. v. Walbro Corp.*, 831 F.2d 1033, 1037 n.2, 4 USPQ2d 1450, 1453 n.2 (Fed. Cir. 1987); *In re Ruth*, 278 F.2d 729, 730, 126 USPQ 155, 156 (CCPA 1960); *In re Rogoff*, 261 F.2d 601, 603, 120 USPQ 185, 186 (CCPA 1958). A claim which reads on something which the original claims do not is a broadened claim. A claim would be considered a broadening claim if the patent owner would be able to sue any party for infringement who previously could not have been sued for infringement. Thus, where the original patent claims only the process, and the reissue application adds (for the first time) product claims, the scope of the claims has been broadened since a party could not be sued for infringement of the product based on the claims of the original patent.

The addition of combination claims in a reissue application where only subcombination claims were present in the original patent could be a broadening of the invention. The question which must be resolved in this case is whether the combination claims added in the reissue would be for "the invention as claimed" in the original patent. See *Ex parte Wikdahl*, 10 USPQ2d at 1549. The newly added combination claims should be analyzed to determine whether they contain every limitation of the subcombination of any claim of the original patent. If the combination claims (added in the reissue) contain every limitation of the subcombination (which was claimed in the original application), then infringement of the combination must also result in infringement of the subcombination. Accordingly, the patent owner could not, if a reissue patent issues with the combination claims, sue any new party for infringement who could not have been sued for infringement of the original patent. Therefore, broadening does not exist, in spite of the addition of the combination.